

## **AMENDMENTS TO THE SPECIFICATION:**

On page 4, please replace the paragraph starting on line 24 with the following amended paragraph:

--Fig. 1 is top view of a casting die ~~plate~~ body in accordance with the invention;--.

On page 4, please replace the paragraph starting on line 26 with the following amended paragraph:

--Fig. 2 is a ~~detailed view of the pouring~~ side view of ~~the~~ a casting die plate, ~~showing cooling grooves.~~ --.

On page 4, please insert the following paragraphs starting on line 28:

--Fig. 3 is a transverse cross sectional view taken along line 3T in Fig. 2;

Fig. 4 is a detailed view of a portion of the side plate (shown without bore holes); and

Fig. 5 is a detailed view of another portion of the side plate (shown without bore holes).--.

On page 4, please replace the paragraph starting on line 30 with the following replacement paragraph:

--The crux of the invention is the feature of putting into place a significantly stronger cooling of the casting die body in the supercritically stressed areas on both sides of the funnel. According to the invention, it is proposed to increase the cooling capacity in these critical areas preferably 10 to 20% in relation to the horizontal adjoining areas. Coolant channels 6 (Figures 4 and 5), for example, can be advantageously made narrower here, so that the cooled surface is made larger. Alternatively, the coolant channels 6 can be brought closer to the surface locally; in this case, the system operates, in an unusual fashion, with varying -- effectively active -- cooling wall thicknesses above the cooling water. The same applies to the cooling bore holes 14 (Figure 3). In addition, broad-side plates, configured having groove-shaped coolant channels 6, in the critical areas of the funnel transition can be provided with additional cooling bore holes 14; in a

surprising manner, in spite of the small wall thickness, the resistance to cracks of the casting die material is increased also here and with it the overall durability of the casting die plate.--.

On page 4, line 30 please insert the following paragraph:

--As seen in Figure 1, a casting die body 10 is made, in each case, of two broad-side walls or casting die plates 1, situated facing each other, and narrow-side walls 12 limiting the width of a billet (not shown), the broadside walls or casting die plate 1 forming a funnel-shaped pouring-in area (between C and C') having funnel side areas (between lines B and C in Figures 1 and 2).--.

On page 5, please replace the paragraph starting on line 27 with the following replacement paragraph:

--Funnel casting die plate 1, represented in Figure 1, in the horizontal dimension (vertical line C) of funnel 2 on the a pouring side 4, has the highest thermal stressing. A direct consequence is a maximum surface-related heat flow of 4.7 to 5.2 and MW/m<sup>2</sup> lying directly beneath bath surface 3 at C in the pouring direction GR. Present on pouring side 4 of casting die plate 1 are maximum temperatures of approximately 400°C, calculated by computer. Actively effective wall thickness d of casting die plate 1 of copper is now reduced in critical area 5 between the lines B, C, and D, to the upper 200 mm of the casting die plate from  $d_1 = 20$  mm to  $d_2 = 18$  mm (Figure 2 Figures 4 and 5).--.

On page 6, please replace the paragraph starting on line 4 with the following replacement paragraph:

--Thus a maximum surface temperature this reduced by 28°C is achieved; this preferred cooling is maintained given appropriate reworking of casting die plate 1. Although the wall thickness  $d_2$  in critically stressed area 5 is 2 mm smaller, the result, surprisingly, is still a generally greater service lifetime of casting die plate 1, including reworking. Area 5, which is more intensively cooled due to cooling grooves 6 that are placed deeper (wall thickness between pouring surface 4 and a cooling surface 16, 18 mm instead of 20 mm) and cooling bore holes 14 that are spaced closer and run closer to the pouring surface, extends, in the present case, over the

following surfaces (see Figure [[1]] 3 to 5): the horizontal length from turning point B of funnel 2 more than 370 mm to end point D. The more intensive cooling surface extends from plate upper edge 7 up to 200 mm in the pouring direction [[GR]] PD; adjoining is a transitional zone 8 of 50 mm, in which the depth d of cooling grooves 6 is adjusted. The cooling bore holes 14 may be arranged between the cooling grooves 6.--.